



Photoelectric sensors W250, Through-beam photoelectric sensor

WS/WE250-S135



Model Name > [WS/WE250-S135](#)
Part No. > [6010604](#)



Illustration may differ

At a glance

- Versions for 10 - 30 V DC or 12 - 240 V DC/ 24 – 240 V AC voltage supply in compact design
- Mounting bracket included in delivery
- Potentiometer with an easy-to-read positioning indicator for adjusting the sensing range
- Operating mode (light/dark) selectable via control wire
- Cable or rotatable M12 connector
- UL recognized

Your benefits

- Universal AC/DC voltage variants provide high performance and increased flexibility in environments with limited space
- Mounting kit reduces installation time
- Operating mode (light/dark) is selectable via a control cable to reduce the number of device variants
- Mounting compatibility - DC devices and DC/AC devices available in same design

Note: This part is discontinued. Please see the replacement product under "Replacement Products" link. "



Features

Sensor/detection principle:	Through-beam photoelectric sensor
Dimensions (W x H x D):	20 mm x 60 mm x 43 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0 m ... 25 m
Sensing range:	0 m ... 20 m
Type of light:	Visible red light
Light source:	LED ¹⁾
Sensitivity adjustment:	Potentiometer, 2-turn ²⁾
Angle of dispersion:	4 °
Light spot size (distance):	1.5 m (20 m)

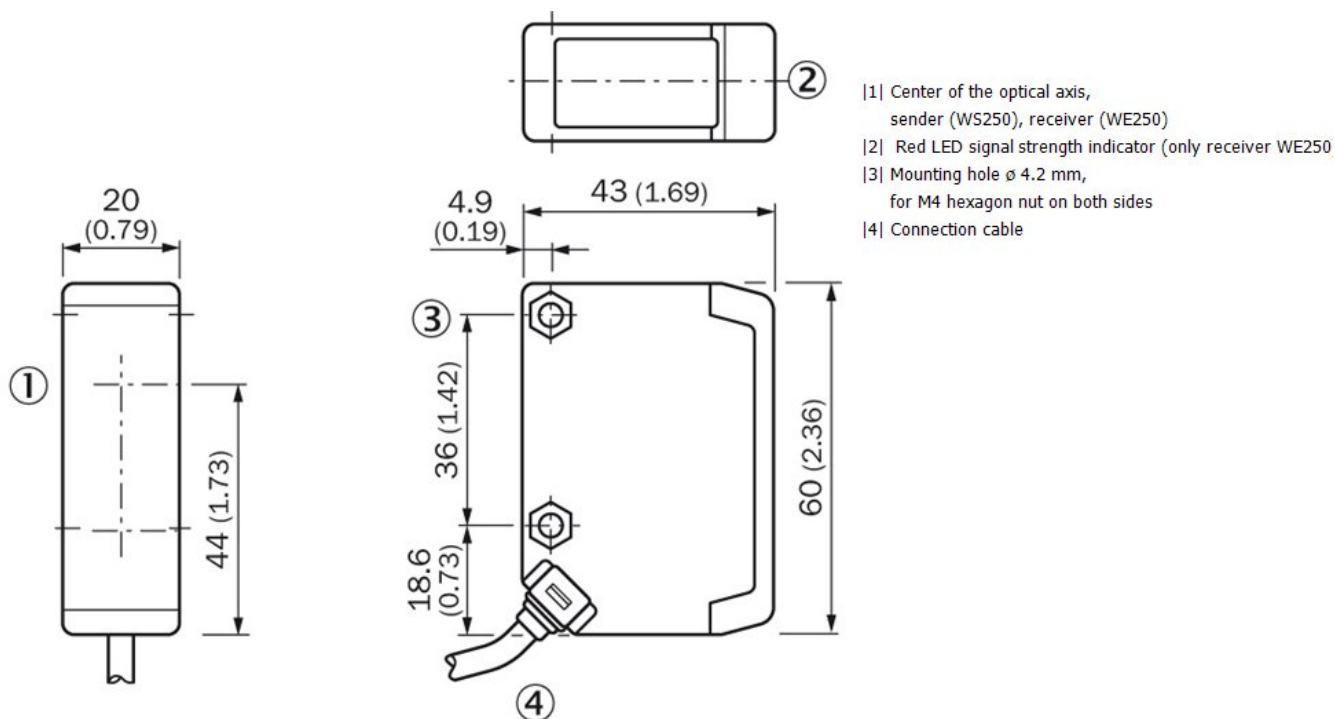
¹⁾ Average service life 100,000 h at Ta = +25 °C ²⁾ With position indicator

Mechanics/electronics

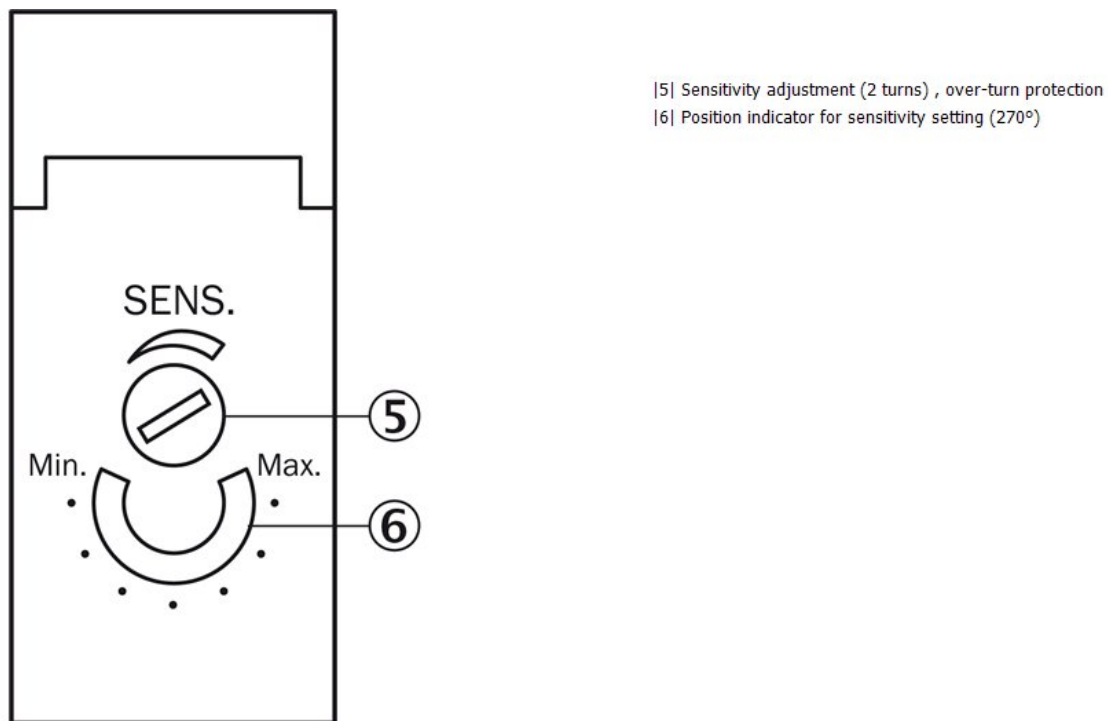
Supply voltage::	12 V DC ... 240 V DC, 24 V AC/DC ... 240 V AC/DC ^{1) 2)}
Power consumption, sender:	≤ 2 VA
Power consumption, receiver:	≤ 2 VA
Output type:	Relay
Output function:	Change-over contacts
Switching mode:	Light switching ³⁾
Output characteristic:	Electrically isolated
Switching current (switching voltage):	3 A (240 V AC), 3 A (30 V DC)
Response time:	≤ 15 ms
Switching frequency:	33 Hz ⁴⁾
Angle of reception:	20 °
Connection type:	Cable, 5-wire, 2 m ⁵⁾
Cable material:	PVC
Conductor cross-section:	0.76 mm ²
Cable diameter:	6.3 mm
Circuit protection::	A, C ^{6) 7)}
Protection class:	II ⁸⁾
Special device:	-
Housing material:	ABS, Plastic
Optics material:	PC
Enclosure rating:	IP 67
Items supplied:	BEF-W250 mounting bracket
Usage category:	AC-15, DC-13, According to EN 60947-1
Ambient operating temperature:	-25 °C ... 55 °C
Ambient storage temperature:	-40 °C ... 70 °C
UL File-No.:	UL No. NRNT2.E128350 & cUL No. NRNT8.E128350

^{1) 2)} ±10 % ³⁾ Provide suitable spark suppression for inductive or capacitive loads ⁴⁾ With light/dark ratio 1:1 ⁵⁾ Do not bend below 0 °C ⁶⁾ A = V_S connections reverse-polarity protected ⁷⁾ C = interference suppression ⁸⁾ Reference voltage 250 V AC

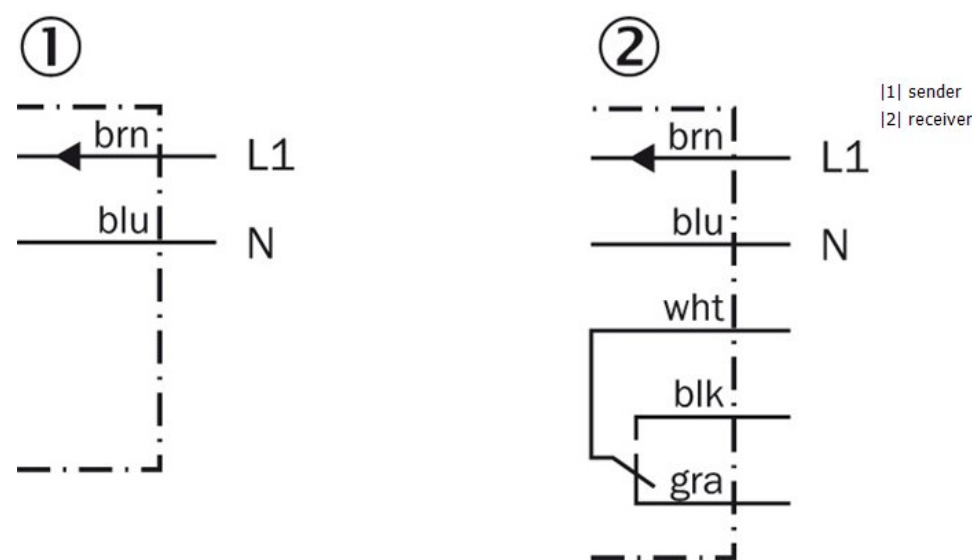
Dimensional drawing



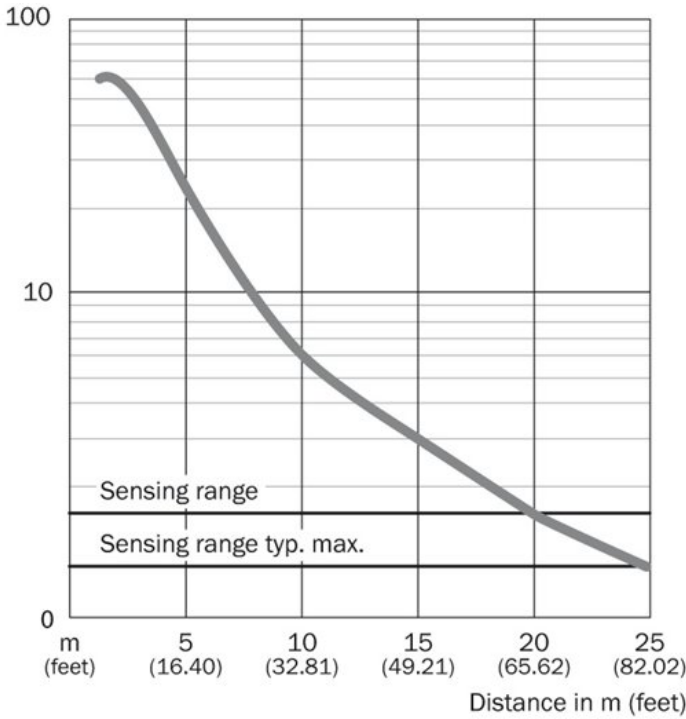
Adjustments possible



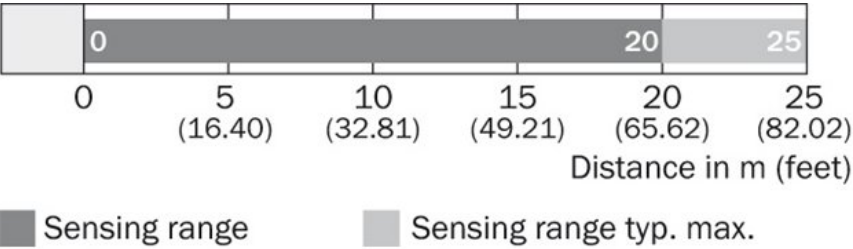
Connection diagram



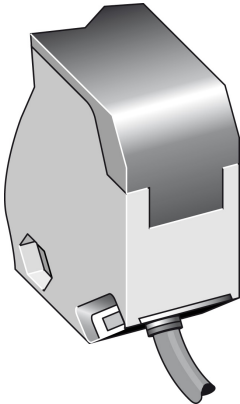
Characteristic curve



Sensing range diagram



Connection type



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